

ABSTRACT

A programmable frequency divider for dividing the frequency of a source signal according to a selectable divisor which is obtained based on a plurality of divisor signals and outputting a result signal having a divided frequency includes at least one cell of a first type. The cells of the first type are cascaded with each other. The programmable frequency divider synchronously resets all of the cells of the first type according to a reset signal in order to selectively switch each cell of the first type to perform a divide-by-two or divide-by-three operation according to a corresponding divisor signal. The last cell of the first type outputs the result signal having the divided frequency.